

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/051252

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 D07B1/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 D07B D02G B60C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| Y | US 4 176 705 A (DRICA-MINIERIS OSWALD A ET AL) 4 December 1979 (1979-12-04) claims 1-3 | 1-5, 8, 9 |
| Y | US 4 408 444 A (BAILLIEVIER FREDDY) 11 October 1983 (1983-10-11) cited in the application claims 1,2,4; figure 2 | 1-5, 8, 9 |
| A | EP 0 790 349 A (BEKAERT SA NV) 20 August 1997 (1997-08-20) claims 1,2,7; figure 1 | 1, 7 |
| A | US 6 007 912 A (DOUJAK SIEGFRIED) 28 December 1999 (1999-12-28) claims 1-3,8,12; figure 1 | 1, 4, 8 |
| | -/-- | |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

D'Souza, J

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| A | US 2003/051788 A1 (BESSON MARC-ANDRE ET AL) 20 March 2003 (2003-03-20) claims 1,3,6; figure 1 ----- | 1,4,8 |
| A | WO 02/088459 A (BEKAERT SA NV ; CAUWELS HANS (BE); VANNESTE STIJN (BE); MEERSSCHAUT DI) 7 November 2002 (2002-11-07) claim 1 ----- | 1-3 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/051252

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|----------------------------|---------------------|
| US 4176705 | A | 04-12-1979 | CA 1060732 A1 | 21-08-1979 |
| | | | DE 2701025 A1 | 21-07-1977 |
| | | | FR 2338152 A1 | 12-08-1977 |
| | | | GB 1535105 A | 06-12-1978 |
| | | | IE 44049 B1 | 29-07-1981 |
| | | | IT 1076523 B | 27-04-1985 |
| | | | JP 1180144 C | 30-11-1983 |
| | | | JP 52088902 A | 26-07-1977 |
| | | | JP 58011325 B | 02-03-1983 |
| | | | LU 76543 A1 | 17-06-1977 |
| | | | MX 145482 A | 24-02-1982 |
| | | | NL 7700064 A ,B, | 19-07-1977 |
| | | | ZA 7607438 A | 30-11-1977 |
| US 4408444 | A | 11-10-1983 | NL 8102273 A | 01-12-1982 |
| | | | AT 384043 B | 25-09-1987 |
| | | | AT 181982 A | 15-02-1987 |
| | | | BE 893105 A2 | 08-11-1982 |
| | | | BR 8202660 A | 19-04-1983 |
| | | | CA 1174565 A1 | 18-09-1984 |
| | | | DE 3215638 A1 | 25-11-1982 |
| | | | ES 265009 Y | 01-06-1983 |
| | | | FR 2505372 A1 | 12-11-1982 |
| | | | GB 2098251 A ,B | 17-11-1982 |
| | | | IT 1147949 B | 26-11-1986 |
| | | | JP 1603152 C | 29-03-1991 |
| | | | JP 2029408 B | 29-06-1990 |
| | | | JP 57193253 A | 27-11-1982 |
| | | | KR 8801147 B1 | 01-07-1988 |
| | | | LU 84130 A1 | 13-09-1982 |
| | | | MX 159716 A | 09-08-1989 |
| | | | ZA 8202743 A | 30-03-1983 |
| EP 0790349 | A | 20-08-1997 | EP 0790349 A1 | 20-08-1997 |
| | | | AT 194176 T | 15-07-2000 |
| | | | BR 9700980 A | 01-09-1998 |
| | | | CA 2196345 A1 | 16-08-1997 |
| | | | CN 1165221 A ,B | 19-11-1997 |
| | | | DE 69702353 D1 | 03-08-2000 |
| | | | DE 69702353 T2 | 14-12-2000 |
| | | | ES 2150186 T3 | 16-11-2000 |
| | | | ID 15960 A | 21-08-1997 |
| | | | JP 9228274 A | 02-09-1997 |
| | | | RU 2126859 C1 | 27-02-1999 |
| | | | US 5843583 A | 01-12-1998 |
| US 6007912 | A | 28-12-1999 | DE 19535597 A1 | 27-03-1997 |
| | | | AT 197327 T | 15-11-2000 |
| | | | BR 9610696 A | 21-12-1999 |
| | | | CA 2232494 A1 | 03-04-1997 |
| | | | CN 1202943 A ,B | 23-12-1998 |
| | | | CZ 9800891 A3 | 15-07-1998 |
| | | | DE 59606101 D1 | 07-12-2000 |
| | | | WO 9712090 A1 | 03-04-1997 |
| | | | EP 0852633 A1 | 15-07-1998 |
| | | | ES 2153596 T3 | 01-03-2001 |
| | | | JP 11512786 T | 02-11-1999 |
| | | | RU 2151226 C1 | 20-06-2000 |

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|----|---------------------|----------------------------|---------------------|
| US 6007912 | A | | SK 37098 A3 | 04-11-1998 |
| | | | TR 9800546 T2 | 21-07-1998 |
| US 2003051788 | A1 | 20-03-2003 | DE 10144833 A1 | 30-04-2003 |
| | | | EP 1293600 A2 | 19-03-2003 |
| WO 02088459 | A | 07-11-2002 | CZ 20032888 A3 | 14-01-2004 |
| | | | WO 02088459 A1 | 07-11-2002 |
| | | | EP 1381730 A1 | 21-01-2004 |
| | | | SK 13232003 A3 | 07-07-2004 |
| | | | US 2004134181 A1 | 15-07-2004 |

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